much better, we might much further discover its divisibility. Nor are these flakes only regular as to the smoothness of their Surfaces; but thirdly, In many Plates they may be perceived to be terminated naturally with edges of the figure of a *Rhomboeid*. This Figure is much more conspicuous in our English talk, much whereof is found in the Lead Mines, and is commonly called *Spar*, and *Kauck*, which is of the same kind of substance with the *Selenitis*, but is seldom found in so large flakes as that is, nor is it altogether so tuff, but is much more clear and transparent, and much more curiously shaped, and yet may be cleft and flak'd like the other *Selenitis*. But fourthly, this stone has a property, which in respect of the *Microscope*, is more notable, and that is, that it exhibits several appearances of Colours, both to the naked Eye, but much more conspicuously to the *Microscope*; for the exhibiting of which, I took a piece of *Muscovy-glass*, and splitting or cleaving it into thin Plates, I found that up and down in several parts of them I could plainly perceive several white specks or flaws, and others diversly coloured with all the Colours of the *Rainbow*; and with the *Microscope* I could perceive, that these Colours were ranged in rings that incompassed the white speck or flaw, and were round or irregular, according to the shape of the spot which they terminated; and the position of Colours, in respect of one another, was the very same as in the *Rainbow*. The consecution of those Colours from the middle of the spot outward being Blew, Purple, Scarlet, Yellow, Green; Blew, Purple, Scarlet, and so onwards, sometimes half a score times repeated, that is, there appeared six, seven, eight, nine or ten several coloured rings or lines, each incircling the other, in the same manner as I have often seen a very *vivid Rainbow* to have four or five several Rings of Colours, that is, accounting all the Gradations between Red and Blew for one: But the order of the Colours in these Rings was quite contrary to the primary or innermost *Rainbow*, and the same with those of the secondary or outermost Rainbow; these coloured Lines or *Irises*, as I may so call them, were some of them much brighter then others, and some of them also very much broader, they being some of them ten, twenty, nay, I believe, neer a hundred times broader then others; and those usually were broadish which were neerest the center or middle of the flaw. And oftentimes I found, that these Colours reacht to the very middle of the flaw, and then there appeared in the middle a very large spot, for the most part, all of one colour, which was very vivid, and all the other Colours incompassing it, gradually ascending, and growing narrower towards the edges, keeping the same order, as in the *secundary Rainbow*, that is, if the middle were Blew, the next incompassing it would be a Purple, the third a Red, the fourth a Yellow, *&c.* as above; if the middle were a Red, the next without it would be a Yellow, the third a Green, the fourth a Blew, and so onward,. And this order it alwayes kept whatsoever were the middle Colour.

There was further observable in several other parts of this Body, many Lines or Threads, each of them of some one peculiar Colour, and those so exceedingly bright and vivid, that it afforded a very pleasant object through

through the *Microscope*. Some of these *threads* I
be pieced or made up of several short lengths o
ends (as I may so call them) as a line appearing
through the *Microscope*, has been compounded o
a Peach colour, $\frac{3}{8}$ of a lovely Grass-green, $\frac{3}{4}$ of an
Scarlet, and the rest of the line of a Watchet blew:
much otherwise coloured; the variety being almo
thing which is very observable, is, that if you fin
colours are very broad and conspicuous to the nak
pressing that place with your finger, make the colo
go from one part to another.

There is one *Phænomenon* more, which may, if
bit to the beholder, as it has divers times to me, a
and not less instructive Spectacle; And that is, if c
be used, you may so split this admirable Substance
pretty large Plates (in comparison of those smaller
observe in the Rings) that are perhaps an $\frac{1}{8}$ or a $\frac{1}{6}$
each of them appearing through the *Microscope* mo
and uniformly adorned with some one vivid colou
with the *Microscope*, may be plainly perceived to
qually thick. Two, three, or more of these lying
hibit oftentimes curious compounded colours, w
Compositum, as one would scarce imagine should be
gredients: As perhaps a *faint yellow* and a *blew* may
purple. But when anon we come to the more strict
Phænomena, and to inquire into the causes and reaso
ons, we shall, I hope, make it more conceivable hov
and shew them to be no other then the natural and
sing from the peculiar union of concurrent causes.

These *Phænomena* being so various, and so truly a
tainly be very well worth our inquiry, to examine t
of them, and to consider, whether from these causes
denced, may not be deduced the true causes of t
kind of Colours. And I the rather now do it, in
dix or Digression to this History, then upon the oc
the Colours in Peacocks, or other Feathers, becaus
does afford more variety of particular Colours, so
better wayes of examining each circumstance. A
manifest to him that considers, first, that this lam
simple and regular then the parts of Peacocks feather
ly of an indefinite number of plain and smooth Plate
cumbent on each other. Next, that the parts of this
manageable, to be divided or joyned, then the part
ther, or any other substance that I know. And thirdly
we are able from a colourless body to produce sever
affording all the variety of Colours imaginable:
which the subsequent Inquiry will make manifest.

I